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10/747,949	12/31/2003	Seok Hwa Jeong	0465-1116P	6947
2292 7590 10/20/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
ALVESTEFFER, STEPHEN D				
ART UNIT		PAPER NUMBER		
2175				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/747,949

**Applicant(s)**

JEONG, SEOK HWA

**Examiner**

Stephen Alvesteffer

**Art Unit**

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 7-12, 14-22, 26-39 and 44-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-12, 14-22, 26-39 and 44-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20080521
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action is responsive to the Amendment filed July 1, 2008. Claims 1, 10, 19, 21, 29, 35, 36, and 46 are currently amended. Claims 4-6, 13, 23-25, and 40-43 are cancelled. Claims 47-49 are new. Claims 1, 21, and 46 are independent. Claims 1-3, 7-12, 14-22, 26-39, and 44-49 remain pending.

The Information Disclosure Statement (IDS) filed May 21, 2008 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 14, 15, 19-21, 32, 33, 35-37, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi, United States Patent Application Publication number 2003/0191960 and Lee, United States Patent number 6,076,169.

**Regarding claim 1**, Hung-yi teaches a method of providing an advance screen saver warning for a display apparatus, the method comprising:

predetermining a screen saver standby time and an advance screen saver warning time for a current user session (see paragraph [0010]; *"within five minutes before the time of using the computer running out, said main program thereof will send*

*out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the pre-set using time is up, said main program thereof will automatically start said screen saver", the "pre-set using time" being equivalent to the "screen saver standby time", and the "five minutes before the time of using the computer running out" being equivalent to the "advance screen saver warning time");*  
and

activating an advance screen saver warning before activating a screen saver if the current system **usage** time is greater than or equal to a time difference between the screen saver standby time and the advance screen saver warning time (see paragraph [0010]);

controlling, during the continuous execution of the advance screen saver warning, the display apparatus to output at least one of a specified sound and a visual warning message window indicative of a time difference between the screen saver standby time and current system **usage** time, wherein the at least one of the specified sound and the visual warning message window is initiated based on the counting of said current system **usage** time during the current user session (see Hung-yi paragraph [0010]; *"within five minutes before the time of using the computer running out, said main program thereof will send out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the pre-set using time is up, said main*

*program thereof will automatically start said screen saver to keep the computer locked in wait").*

Hung-yi does not disclose counting a current system idle time during which no system input activity is detected; activating an advance screen saver warning based on the system *idle* time (as opposed to the *usage* time), wherein the activated advance screen saver warning is continuously executed by the display apparatus until a detection of system activity, whereupon the advance screen saver warning is deactivated, and wherein the screen saver is activated only if the advance screen saver warning time is completed. However, Lee teaches using a current system idle time to activate a power shutdown function if the current system idle time is greater than or equal to a time difference between the screen saver standby time and the power shutdown function time (see Lee column 3 line 66 through column 4 line 29; "*if no input signal is received, the central processing unit 4 checks whether a second predetermined time period has elapsed, preferably a time period of five minutes. At step S5, if there is no input signal for the duration of the second predetermined time period, the central processing unit 4 terminates the operating system program*"). Lee further teaches that the activated power shutdown function timer is continuously executed by the display apparatus until a detection of system activity, whereupon the power shutdown function timer is deactivated (see Lee column 4 lines 17-29; "*if there is an input signal from the keyboard 2, mouse 3, or other input device 10, the original screen is returned so that the user can resume work on the computer system*"), and wherein the power shutdown function is activated only if the power shutdown function time is

completed (see Lee column 4 lines 17-29; *"if there is no input signal for the duration of the second predetermined time period, the central processing unit 4 terminates the operating system program"*). One of ordinary skill in the art at the time the invention was made would have found it obvious and advantageous to provide an advance warning countdown (as taught by Hung-yi) prior to a disruptive system event such as a locking screen saver (as taught by Hung-yi) or an automatic power shutdown (as taught by Lee) for the purpose of giving users time to prevent the disruptive system event from occurring or to prepare for the event.

**Regarding claim 2**, Hung-yi/Lee teaches deactivating the advance screen saver warning and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time (see Hung-yi claim 1; *"sending out warning signal and sound to remind the user that the pre-set time-limit is coming to an end soon; once passing the pre-set using -time, said main program thereof restarting the screen saver"*). It is inherent in Hung-yi/Lee's invention that the advance screen saver warning is deactivated prior to activation of the screen saver.

**Regarding claim 14**, Hung-yi/Lee teaches that the specified sound is any one of a computer-generated sound and a human voice indicating a time until the screen saver is activated (see Hung-yi paragraph [0010]; *"said main program thereof will send out a warning signal and sound to remind the user of the time-limit"*).

**Regarding claim 15**, Hung-yi/Lee teaches that the screen saver standby time is a total length of system idle time that must elapse before activating the screen saver

(see Lee column 1 lines 37-55; *"Conventionally, a screen saver mode is initiated when a computer is idle (not used) for a predetermined time"*).

**Regarding claim 19**, Hung-yi/Lee teaches that the system input activity includes at least one of a horizontal synchronization signal, a vertical synchronization signal, and a manual user input during the current user session (see Lee column 3 line 66 through column 4 line 9; *"if there is no input signal for a first predetermined time period from the keyboard 2, mouse 3, or input device 10, then the operation of a screen saver program begins"*).

**Regarding claim 20**, Hung-yi/Lee teaches that the manual user input is made by a user through a keyboard or mouse (see Lee column 3 line 66 through column 4 line 9; *"if there is no input signal for a first predetermined time period from the keyboard 2, mouse 3, or input device 10, then the operation of a screen saver program begins"*).

**Claims 21, 32, 33, and 35-37** recite a display apparatus having substantially the same limitations as the method of claims 1, 14, 15, 19, and 20. Therefore, the claims are rejected under the same rationale.

**Regarding claim 47**, Hung-yi/Lee teaches that the current user session is a continuous single-user session beginning when an original user logs on a computer system including the display apparatus until the original user logs off the computer system (see Hung-yi paragraph [0010]).

**Claim 48** recites a display apparatus having substantially the same limitations as the method of claim 47. Therefore, claim 48 is rejected under the same rationale.

Claims 3, 16-18, 22, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi (2003/0191960) *supra*, Lee (6,076,169) *supra*, and Flannery, United States Patent 6,286,106.

**Regarding claim 3**, Hung-yi/Lee teaches all the limitations of claim 3 but does not explicitly teach the deactivating the advance screen saver warning and the activating the screen saver are performed simultaneously. Flannery teaches a computer power down notification that simultaneously deactivates the advance power down warning and activates the power down (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the computer power down notification of Flannery in the computer lock system of Hung-yi/Lee in order to notify users of the time remaining before the screen saver will lock the computer.

**Regarding claim 16**, Hung-yi/Lee/Flannery teaches that the advance screen saver warning time is a length of time during which the advance screen saver warning is continuously activated before activating the screen saver (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).



**Regarding claim 17**, Hung-yi/Lee/Flannery teaches that the screen saver standby time is predetermined to an automatically assigned default value or a manually selected value (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

**Regarding claim 18**, Hung-yi/Lee/Flannery teaches that the screen saver warning time is predetermined to an automatically assigned default value or a manually selected value (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

**Claims 22 and 34** recite a display apparatus having substantially the same limitations as the method of claims 3 and 16, respectively. Therefore, the claims are rejected under the same rationale.

Claims 7-12, 26-31, 38, 39, 44-46, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi (2003/0191960) *supra*, Lee (6,076,169) *supra*, and Pollack, United States Patent 5,153,580.

**Regarding claim 7**, Hung-yi/Lee teaches every limitation of claim 7 except that there is a visual warning message window that includes at least one of a textual representation and a graphical representation indicating the remaining time. Pollack teaches displaying a visual warning message window on a television to warn viewers that the television is about to power down due to inactivity (see Pollack Figures 5 and 6 and column 6 line 63 through column 7 line 20; *"FIG. 6 illustrates a screen display in which the bar graph of FIG. 5 has been replaced with a "time remaining" display 630"*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a graphical indication of the remaining time as taught by Pollack with the invention of Hung-yi/Lee in order to provide users with a visual warning of a disruptive event such as the screen saver coming on.

**Regarding claim 8**, Hung-yi/Lee/Pollack teaches that the graphical representation included in the warning message window is any one of a bar-type graph, a clock-type graph with a moving indicator, and a pie-type graph (see Pollack Figure 5 and column 6 line 63 through column 7 line 20; *"In FIG. 5, a bar graph 520 is displayed along with the video on a screen 510 of a television receiver 500. The bar may be indicative of time remaining until turn off"*).

**Regarding claim 9**, Hung-yi/Lee/Pollack teaches that the visual warning message window is displayed on a predetermined screen portion of the display screen, which is automatically determined by default or is manually determined by an operator (see Pollack Figures 5 and 6 and column 6 line 63 through column 7 line 20; *"FIG. 6 illustrates a screen display in which the bar graph of FIG. 5 has been replaced with a "*

*time remaining" display 630"*, the location of the visual warning message window is inherently predetermined).

**Regarding claim 10**, Hung-yi/Lee/Pollack teaches undisplaying the visual warning message window from the display screen if any system input activity is detected during the current user session (see Pollack column 3 lines 55-63; *"If modulated IR signals are detected during the 30 minute interval, then TIMER 114 is reset, and begins timing a new 30 minute interval"*).

**Regarding claim 11**, Hung-yi/Lee/Pollack teaches undisplaying the visual warning message window and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time (see Pollack column 3 lines 55-63; *"Assuming that the timer is enabled, if no modulated IR signals are detected during the 30 minute sleep time interval, the receiver is turned off"*, when the receiver is turned off, the visual warning message window will inherently be undisplayed).

**Regarding claim 12**, Hung-yi/Lee teaches that the visual warning message window is an on-screen-display (OSD) window (see Pollack claim 2; *"an indication to a user that automatic removal of operating power from said consumer electronics unit is enabled is an on-screen display means for generating a visual display when said timer means is timing said predetermined time interval"*).

**Claims 26-31** recite a display apparatus having substantially the same limitations as the method of claims 7-12, respectively. Therefore, the claims are rejected under the same rationale.

**Regarding claim 38**, Hung-yi/Lee/Pollack teaches a memory coupled to the controller for storing the predetermined screen saver standby time and advance screen saver warning time (see Pollack column 2 line 53 through column 3 line 9; *"Microcomputer 110 includes program memory (ROM) 112, and stores channel-related data in a random-access memory (RAM) 120. RAM 120 may be either internal to, or external to, microprocessor 110, and may be of either the volatile or non-volatile type. The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM). One skilled in the art will recognize that if volatile memory is utilized, that it may be desirable to use a suitable form of standby power to preserve its contents when the receiver is turned off"*).

**Regarding claim 39**, Hung-yi/Lee/Pollack teaches that the memory is an Electrically Erasable Programmable Read-only Memory (EEPROM) (see Pollack column 2 line 53 through column 3 line 9; *"The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM)"*).

**Regarding claim 44**, Hung-yi/Lee/Pollack teaches that the predetermined screen saver standby time and advance screen saver warning time are manually set by a user of the display apparatus (see Pollack column 1 lines 16-25; *"Many modern television receivers include a so-called sleep timer function for automatically turning the receiver off after a predetermined time interval set by a user"*).

**Claim 45** recites a display apparatus with substantially the same limitations as the method of claim 44. Therefore, claim 45 is rejected under the same rationale.

**Claim 46** recites a method having substantially the same limitations as the method of claim 11. Therefore, claim 46 is rejected under the same rationale.

**Regarding claim 49**, Hung-yi/Lee teaches that the current user session is a continuous single-user session beginning when an original user logs on a computer system including the display apparatus until the original user logs off the computer system (see Hung-yi paragraph [0010]).

### ***Response to Arguments***

Applicant has amended claims 10 and 46 to address minor informalities. Accordingly, the objections to the claims are withdrawn.

Applicant asserts that Hung-yi does not teach or suggest controlling the display apparatus before activation of the screen saver program during a current user session. The examiner respectfully disagrees.

Hung-yi paragraph [0010] states "*when the pre-set using time is up, said main program thereof **will automatically start said screen saver to keep the computer locked** in wait for another legal user to insert the IC card for the access to the computer system or for the present user to close and leave the computer system*" (emphasis added). Applicant is arguing that by the time the screen saver of Hung-yi comes on, the user's session has technically already ended. This is technically true, as computers as generally known in the art cannot perform two instructions at the same time. However, the same is also true for the invention of the instant application. Applicant states in

remarks page 11 that *"once the screen saver is activated, the original user needs to reenter a password or must go through a complicated authentication process in order to access the system"*. In Applicants' invention, by the time the screen saver comes on, the user's session is already over. For both inventions, the user's session ends and the screen saver comes on at **significantly the same time** (i.e., there is no intended delay between ending the user's session and starting the screen saver).

Applicant also argues that Hung-yi's invention uses the countdown for a different purpose than applicant's recited invention, and that Hung-yi's invention has no **need** for any screen saver function at all. However, this argument is based on intended use of the invention, which bears no weight in determining anticipation. Hung-yi teaches displaying a countdown that displays a screen saver when the timer reaches zero, which substantially anticipates the claims of the instant application.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571)270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571)272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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